



Clean Version Of The Pending Claims Under 37 C.F.R. 1.121(c)(3):

Claims 1-10 and 12-44, now pending, are submitted below in accordance with 37 C.F.R. §1.121(c)(3), which presents a clean version of the entire set of pending claims.

1. A television tuner comprising:

a country table listing a plurality of countries;

multiple channel-to-frequency mapping tables correlating channel numbers to corresponding frequencies for associated countries in the country table, the channel-to-frequency mapping tables being indexed by the country table so that selection of a country in the country table references an associated channel-to-frequency mapping table for the selected country; and

a tuning device to tune to a particular frequency within the channel-to-frequency mapping table associated with the selected country upon selection of a corresponding channel.

2. A television tuner as recited in claim 1, wherein the country table lists the countries according to a uniquely assigned country code.

3. A television tuner as recited in claim 1, wherein the country table lists the countries according to an International Telecommunications Union (ITU) code.

1 4. A television tuner as recited in claim 1, wherein the channel-to-
2 frequency mapping tables also contain a television standard for the associated
3 countries.

4
5 5. A television tuning component for a television tuning system,
6 comprising:

7 a country table listing a plurality of countries; and
8 multiple channel-to-frequency mapping tables correlating channel numbers
9 to corresponding frequencies for associated countries in the country table, the
10 channel-to-frequency mapping tables being indexed by the country table so that
11 selection of a country in the country table references an associated channel-to-
12 frequency mapping table for the selected country and selection of a channel in the
13 channel-to-frequency mapping table maps to a corresponding frequency.

14
15 6. A television tuning component as recited in claim 5, wherein the
16 country table lists the countries according to a uniquely assigned country code.

17
18 7. A television tuning component as recited in claim 5, wherein the
19 country table lists the countries according to an International Telecommunications
20 Union (ITU) code.

21
22 8. A television tuning component as recited in claim 5, wherein the
23 channel-to-frequency mapping tables also contain a television standard for the
24 associated countries.
25

1 9. A television tuning component as recited in claim 5, embodied in
2 software as a dynamic linked library stored on a computer-readable storage
3 medium.

4
5 10. A television tuner incorporating the television tuning component as
6 recited in claim 5.

7
8 11. ~~Cancelled~~

9
10 12. (Amended) A tuner, comprising:
11 tuner circuitry to tune to various television frequencies carrying television
12 video signals;

13 a tuner module coupled to adjust the tuner circuitry to scan multiple
14 channels within a particular locale for corresponding tuning frequencies, the tuner
15 module storing the tuning frequencies for the particular locale;

16 upon transporting the tuner to a new locale, the tuner module scans multiple
17 channels within the new local for corresponding tuning frequencies; and

18 upon transporting the tuner back to the particular locale, the tuner retrieves
19 the stored tuning frequencies to restore operation in the particular locale.

20
21 13. A television tuning system comprising:
22 tuner circuitry to tune to various television frequencies carrying television
23 video signals;

24 video decoder circuitry coupled to receive a television video signal from the
25 tuner circuitry and to convert the television video signal to digital video data;

1 a tuner module coupled to adjust the tuner circuitry to a particular television
2 frequency;

3 a video decoder module to decode the digital video data according to a
4 particular video standard;

5 wherein the tuner module has a country table listing a plurality of countries
6 and multiple channel-to-frequency mapping tables that provide video standards
7 and correlate channel numbers to corresponding frequencies for associated
8 countries in the country table, the channel-to-frequency mapping tables being
9 indexed by the country table so that selection of a country in the country table
10 references an associated channel-to-frequency mapping table for the selected
11 country; and

12 wherein the tuner module selects a channel-to-frequency mapping table
13 based upon input of a particular country and outputs a video standard to the video
14 decoder for use in decoding the digital video data, the tuner module further
15 selecting a television frequency from the selected channel-to-frequency mapping
16 table based upon input of a corresponding channel and outputting the selected
17 television frequency to the tuner circuitry to cause the tuner circuitry to tune to the
18 selected television frequency.

19
20 14. A television tuning system as recited in claim 13, wherein the
21 country table lists the countries according to an International Telecommunications
22 Union (ITU) code.
23
24
25

1 15. A television tuning system as recited in claim 13, wherein the tuner
2 module is embodied as a dynamic linked library.

3
4 16. A television tuning system as recited in claim 13, further comprising
5 a second tuner module different from the tuner module, the second tuner module
6 being used to replace the tuner module during upgrade without replacing the
7 tuning circuitry and the decoding circuitry.

8
9 17. A television tuning system as recited in claim 13, wherein the tuner
10 module supports an application program interface to expose functionality of the
11 tuner module to an application program.

12
13 18. A television tuning system as recited in claim 13, wherein the tuner
14 module stores a set of television frequencies that map to corresponding channels
15 within the particular country for subsequent retrieval.

16
17 19. A television tuning manager for a television tuner, the television
18 tuning manager being implemented in software stored on a computer-readable
19 storage medium, the television tuning device comprising:

20 a country table listing a plurality of countries;

21 multiple channel-to-frequency mapping tables correlating channel numbers
22 to corresponding frequencies for associated countries in the country table, the
23 channel-to-frequency mapping tables being indexed by the country table so that
24 selection of a country in the country table references an associated channel-to-
25 frequency mapping table for the selected country;

1 a code segment to select a channel-to-frequency mapping table based upon
2 input of a particular country; and

3 a code segment to output a broadcast frequency from the selected channel-
4 to-frequency mapping table based upon input of a corresponding channel.

5
6 20. A television tuning manager as recited in claim 19, wherein the
7 country table lists the countries according to a uniquely assigned country code.

8
9 21. A television tuning manager as recited in claim 19, wherein the
10 country table lists the countries according to an International Telecommunications
11 Union (ITU) code.

12
13 22. A television tuning manager as recited in claim 19, wherein the
14 channel-to-frequency mapping tables also contain a television standard for the
15 associated countries.

16
17 23. A television tuning manager as recited in claim 19, further
18 comprising a code segment to store a set of broadcast frequencies that map to
19 corresponding channels within the particular country for subsequent retrieval.

20
21 24. A television tuning manager as recited in claim 19, embodied as a
22 software dynamic linked library stored on a computer-readable storage medium.

1 25. A television tuning manager as recited in claim 19, embodied as a
2 computer software module that is dynamically accessible by an application
3 program, the television tuning manager further comprising an application program
4 interface to expose functionality of the television tuning manager to the
5 application program.

6
7 26. An application program interface for a television tuning system, the
8 application program interface being embodied on a computer-readable medium
9 and having methods for performing the following functions:

10 setting a current TV channel;

11 retrieving the current TV channel;

12 setting a country code;

13 retrieving the country code;

14 setting a storage index for regional channel to frequency mappings; and

15 retrieving the storage index.

16
17 27. An application program interface for a television tuning system, the
18 application program interface being embodied on a computer-readable
19 medium and having methods for performing the following functions:

20 retrieving all analog video TV standards supported by the tuning system;

21 retrieving a current analog video TV standard in use;

22 setting a current TV channel;

23 retrieving the current TV channel;

24 retrieving highest and lowest channels available;

25 scanning for a precise signal on the current TV channel's frequency;

1 setting a country code;
2 retrieving the country code;
3 setting a storage index for regional channel to frequency mappings;
4 retrieving the storage index;
5 retrieving a number of TV sources plugged into the tuning system;
6 setting a type of tuning system;
7 retrieving the type of tuning system;
8 retrieving a current video frequency; and
9 retrieving a current audio frequency.
10

11 28. A method comprising the following steps:

12 receiving an ITU (International Telecommunications Union) code for a
13 particular country; and
14 selecting, based on the ITU code, a set of TV channel-to-TV frequency
15 mappings for use in the particular country.
16

17 29. A method as recited in claim 28, further comprising the step of
18 selecting, based on the ITU code, a TV standard for use in the particular country.
19

20 30. A method as recited in claim 28, further comprising the step of
21 storing the selected set of TV channel-to-TV frequency mappings.
22

23 31. A computer-readable medium having computer-executable
24 instructions for performing the steps in the method as recited in claim 28.
25

1 32. (Amended) A method comprising the following steps:
2 receiving a reference to a country;
3 selecting, based on the country reference, a set of channel-to-frequency
4 mappings correlating channels to corresponding TV frequencies in the country;
5 receiving a channel; and
6 selecting, based on the channel, a TV frequency that maps to the channel.

7
8 33. A method as recited in claim 32, further comprising the step of
9 tuning to the TV frequency.

10
11 34. A method as recited in claim 32, wherein the country reference is an
12 ITU (International Telecommunications Union) code.

13
14 35. A method as recited in claim 32, further comprising the step of
15 selecting, based on the country reference, a TV standard for the country.

16
17 36. A method as recited in claim 32, further comprising the step of
18 scanning for a better quality frequency within the channel.

19
20 37. A method as recited in claim 32, wherein the step of selecting a set
21 of channel-to-frequency mappings comprises the following steps:

22 looking up the country in a country table that lists multiple countries; and
23 indexing from an entry for the country in the country table to a particular
24 channel-to-frequency table, the particular channel-to-frequency table containing
25 mappings of channel numbers to TV frequencies for the country.

1
2 38. A method as recited in claim 37, wherein the step of selecting a TV
3 frequency comprises the step of looking up in the particular channel-to-frequency
4 table a TV frequency that corresponds to the channel.

5
6 39. A computer-readable medium having computer-executable
7 instructions for performing the steps in the method as recited in claim 32.

8
9 40. A method comprising the following steps:
10 configuring a tuning system for operation in a first locale by determining
11 tuning frequencies for an associated set of channels;
12 storing the tuning frequencies for the first locale;
13 upon transporting the tuning system to a second locale, reconfiguring the
14 tuning system for operation in the second locale; and
15 upon transporting the tuning system back to the first locale, retrieving the
16 stored tuning frequencies to restore operation in the first locale.

17
18 41. A method as recited in claim 40, wherein the configuring step
19 comprises the step of scanning for optimal tuning frequencies for the associated
20 set of channels.

21
22 42. A computer-readable medium having computer-executable
23 instructions for performing the steps in the method as recited in claim 40.

24
25 *Sub D1* 43. A tuning system comprising:

1 a country table listing a plurality of countries; and,
2 multiple channel-to-frequency mapping tables correlating channel numbers
3 to corresponding frequencies for associated countries in the country table, the
4 channel-to-frequency mapping tables being indexed by the country table so that
5 selection of a country in the country table references an associated channel-to-
6 frequency mapping table for the selected country, and wherein said tuning system
7 adjusts to a particular video standard based on a selected channel from one of the
8 multiple channel-to-frequency mapping tables.

B1
concl.
10 44. One or more computer-readable media having computer readable
11 instructions thereon which, when executed by a computer, cause the computer to:
12 receive data regarding a selected country;
13 map to channels available for the selected country;
14 receive data regarding a selected channel;
15 map to an appropriate video standard based on at least one of the selected
16 country and selected channel; and,
17 format a tuning component to the appropriate video standard.

18
19
20
21
22
23
24
25